## **ABSTRACT**

[47] Parallel cachelets are provided for a level of cache in a microprocessor. The cachelets may be independently addressable. The level of cache may accept multiple load requests in a single cycle and apply each to a respective cachelet. Depending upon the content stored in each cachelet, the cachelet may generate a hit/miss response to the respective load request. Load requests that hit their cachelets may be satisfied therefrom. Load requests that miss their cachelets may be referred to another level of cache.